

Date: Thu, 3 Jun 93 11:07:24 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #678  
To: Info-Hams

Info-Hams Digest                      Thu, 3 Jun 93                      Volume 93 : Issue 678

Today's Topics:

    [Q] oper. rules for 49mhz "Part 15". Unlicensed?  
        Bearcat Scanner: Equivalent to 2500XLT-E?  
        FTP Archive for radio mods  
        Generate SSB using combined AM/FM?  
        Mixers (not eggbeaters)  
radio newsgroups in "USENET Readership report for May 93"  
        SLOVAKIA QSL BUREAU??  
        Velocity of light  
Weekly Solar Terrestrial Forecast & Review for 04 June

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 3 Jun 1993 15:03:22 GMT  
From: topaz.bds.com!topaz.bds.com!ron@uunet.uu.net  
Subject: [Q] oper. rules for 49mhz "Part 15". Unlicensed?  
To: info-hams@ucsd.edu

> but what is this 49 MHZ Part 15 ?

These are low power no-license required radios. Their frequently things  
like kids walkie talkies, little boom mike vox handsets, and things like  
my MAXON hands-free communicators.

-Ron

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Date: Thu, 3 Jun 1993 15:28:11 GMT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!  
darwin.sura.net!rsg1.er.usgs.gov!resdgs1.er.usgs.gov!tbodoh@network.UCSD.EDU  
Subject: Bearcat Scanner: Equivalent to 2500XLT-E?  
To: info-hams@ucsd.edu

In article <93154.105400RICHARD@auvm.american.edu>, <RICHARD@auvm.american.edu>  
writes:

|> Does anyone know if Bearcat makes (or will make) a base model equivalent  
|> to the 2500XLT-E handheld?  
|>  
|> Thanks,  
|> Richard, KH6RE  
|>  
|> RICHARD@AUVM.AMERICAN.EDU

--

Yes, the 8500 will be about the same size as the 760 but with all of the  
features of the 2500 and 500 channels. I was told by the folks at  
the Bearcat Radio Club - which I suppose is personed (!) by Uniden staff -  
that the 8500 and 2500 are identical in features other than # of channels.

If this is true - then some of the ads for the 2500 have left out some  
interesting features which are supposed to be on the 8500; triple conversion,  
search & store, hit counter, weather ALERT...

Note that the 890 is a scaled down version of the 8500. It has 200 channels  
and less coverage - and I'll bet it doesn't have triple conversion. All  
three radios apparently missed the cutoff date for approval of radios with  
restorable cellular - so these radios will have non-restorable cellular -  
which sounds like a gauntlet to me ;-)

The 2500 and 890 are supposed to be out in June and the last I heard from  
Uniden was that the 8500 will be out in September. Can anyone who is on  
the waiting list for any of these comment on the latest as far as delivery  
dates? Has anyone actually caressed one and can comment on it? Bye...

++++++  
+ Tom Bodoh - Sr. systems software engineer  
+  
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +  
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66)  
+  
+ "Welcome back my friends to the show that never ends!" EL&P  
+  
++++++

-----  
Date: 3 Jun 1993 17:29:00 GMT  
From: usc!cs.utexas.edu!uwm.edu!linac!unixhub!lll-winken.llnl.gov!  
nirvana.llnl.gov!user@network.UCSD.EDU  
Subject: FTP Archive for radio mods  
To: info-hams@ucsd.edu

I'm trying to find an archive of Ham/Scanner mods via FTP. I used to get them from kilroy.jpl.nasa.gov, but it does not seem to work now, and I tried all the sites in the FAQ, with no luck finding mods. HELP!

I just wanted to find any info for a DJ560 (Alinco) for a friend.

Thanks in advance for any help.

Dave

\*\*\*\*\*  
Dave Parker  
davep@llnl.gov  
KD6RRS  
\*\*\*\*\*

-----  
Date: 2 Jun 93 23:31:05 EDT  
From: usc!math.ohio-state.edu!darwin.sura.net!sgiblab!wetware!spunky.RedBrick.COM!  
psinntp!psinntp!arrl.org@network.UCSD.EDU  
Subject: Generate SSB using combined AM/FM?  
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, fred-mckenzie@ksc.nasa.gov (Fred McKenzie) writes:  
>

>While I've never heard of this, I was aware that either an AM signal or an  
>NBFM signal, can be detected as if it were an SSB signal. Therefore, I  
>would expect that a low level AM or NBFM signal could be passed through an  
>SSB filter, to produce an SSB signal. The limitation is that real filters  
>would not have adequate carrier rejection to produce SSB/Suppressed  
>Carrier.

Crystal filters in many HF rigs result in 10 to 15 dB of additional carrier rejection. Sometimes, the tuning procedure is to set the oscillator frequency so you see X amount of carrier rejection. I seem to recall 12 dB as being the proposed/future??? standard for HF broadcasting. If you really wanted to, you could probably cascade several stock filters to get enough carrier suppression. Or, perhaps

more reasonably, get a filter designed to attenuate the carrier. My guess is that you can place a notch at the carrier frequency. (Elliptic filters?).

>Early methods of producing SSB/Suppressed Carrier, involved combining the  
>carrier and voice, with both voice and carrier signals phase-shifted 90  
>degrees. The voice phase-shift network was somewhat of a compromise, since  
>it had to cover the 300 to 3000 Hz range. This phase-shift modulation  
>scheme produced SSB/Suppressed Carrier, without using a filter.

>

>While the phasing method hasn't been widely used in more modern times, its  
>limitations may have been due to the technology that was current when it  
>was developed. If newer methods could be applied to make it practical,  
>there might be immediate applications in miniaturized transceivers.

January and May 1993 QST describes the basic technique with tested circuits. There is also a reference to the Summer/Fall 1987 VHF Communications that does an analysis on how good it will work with real parts (I've not seen the latter). I'm sure people have done DSP versions, but I've not seen it written up yet.

>With regard to the ARRL reference, I wonder if the resulting SSB signal has  
>much carrier suppression? If it is related to the phasing method, it just  
>might be the "newer method" needed to do the job.

40 to 50 dB of carrier suppression is pretty easy to get with stock SBL-1 mixers at HF. Mixer designs with tweakable parts should be able to do a little better.

Zack Lau KH6CP/1

Internet: [zlau@arrl.org](mailto:zlau@arrl.org) "Working" on 24 GHz SSB/CW gear

Operating Interests: 10 GHz CW/SSB/FM

US Mail: c/o ARRL Lab 80/40/20 CW

225 Main Street Station capability: QRP, 1.8 MHz to 10 GHz

Newington CT 06111 modes: CW/SSB/FM/packet

amtor/baudot

Phone (if you really have to): 203-666-1541

-----  
Date: 3 Jun 1993 16:10:17 GMT

From: [usc!math.ohio-state.edu!sol.ctr.columbia.edu!caen!saimiri.prima.te.wisc.edu!](mailto:usc!math.ohio-state.edu!sol.ctr.columbia.edu!caen!saimiri.prima.te.wisc.edu!usenet.coe.montana.edu!rpi!rs6320.ecs.rpi.edu!maessm@network.UCSD.EDU)  
[usenet.coe.montana.edu!rpi!rs6320.ecs.rpi.edu!maessm@network.UCSD.EDU](mailto:usenet.coe.montana.edu!rpi!rs6320.ecs.rpi.edu!maessm@network.UCSD.EDU)

Subject: Mixers (not eggbeaters)

To: [info-hams@ucsd.edu](mailto:info-hams@ucsd.edu)

I am looking for information on the design and use of RF mixers. I would ap-

preciate any direction as to books, magazine articles, etc. that detail the design and construction of mixers, and equations to figure out such things as LO drive, 3rd-order intercept, etc. I am looking for more than just the Hand-book treatment of the subject. (KE4ZV, KH6CP, you guys listening?)

--

Mat Maessen N2NJZ | maessm@rpi.edu

-----+-----  
disclaimer: Anyone NOT singing will have a can of Foster's lobbed at their heads.

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(c) 1993 Fake-sig Co., Inc.  
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Date: Wed, 2 Jun 1993 18:56:28 MDT  
From: overload.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!  
sol.ctr.columbia.edu!destroyer!cs.ubc.ca!unixg.ubc.ca!kakwa.ucs.ualberta.ca!  
alberta!adec23!ve6mgs!usenet@@dog.ee.lbl.gov  
Subject: radio newsgroups in "USENET Readership report for May 93"  
To: info-hams@ucsd.edu

The following is an ecxerpt fromm the May '93 USENET Readership report. It has the top 5 groups by readership plus all the groups with "radio" in their names.

-----  
From: reid@decwrl.DEC.COM (Brian Reid)  
Newsgroups: news.lists  
Subject: USENET Readership report for May 93  
Summary: data for all groups  
Date: 2 Jun 93 13:57:11 GMT  
Organization: DEC Network Systems Laboratory

	+++ Estimated total number of people who read the group, worldwide.								
		+++ Actual number of readers in sampled population							
			+++ Propagation: how many sites receive this group at all						
				+++ Recent traffic (messages per month)					
					+++ Recent traffic (kilobytes per month)				
						+++ Crossposting percentage			
							+++ Cost ratio: \$US/month/rdr		
								+++ Share: % of newsrdrers	
								who read this group.	
	V	V	V	V	V	V	V	V	
1	230000	4611	92%	1	13.6	100%	0.00	10.0%	news.announce.newusers
2	230000	4447	88%	1	29.2	100%	0.00	9.7%	news.answers
3	190000	3729	85%	1473	2931.4	24%	0.02	8.1%	misc.jobs.offered
4	190000	3667	67%	2377	5132.2	36%	0.03	8.0%	alt.sex



Taylor) writes:

>free space), Does anyone out there know why Einstein used the term  
>c in the famous equation,  $E = mc^2$ , where c = velocity of  
>light (300,000 mtrs/sec) ??  
>Seth T. KC2WE

Maybe because he figured out that the velocity of light was  
a constant. Therefore, 'c' for constant. Just a guess.

== I used to be young and foolish. Now I'm just foolish. ==  
Ronnie D. Hughes, N5CSE | ronh@sunriver.com or  
SunRiver Corp. | uunet!sunriv!ronh  
2600 McHale Court, #125 | (512) 835-8001 ext. 118  
Austin, TX 78758 |

-----  
Date: 3 Jun 93 16:50:54 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Weekly Solar Terrestrial Forecast & Review for 04 June  
To: info-hams@ucsd.edu

--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---  
June 04 to June 13, 1993

Report Released by Solar Terrestrial Dispatch  
P.O. Box 357, Stirling, Alberta, Canada  
T0K 2E0  
Accessible BBS System: (403) 756-3008

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SOLAR AND GEOPHYSICAL ACTIVITY FORECASTS AT A GLANCE  
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10-DAY SOLAR/RADIO/MAGNETIC/AURORAL ACTIVITY OUTLOOK

	10.7 cm	HF Propagation +/- CON							SID	AU.BKSR DX							Mag	Aurora			
	SolrFlx	LO	MI	HI	PO	SWF	%MUF	%	ENH	LO	MI	HI	LO	MI	HI	%	K	Ap	LO	MI	HI
04	135	G	G	F	F	40	-10	70	40	NA	NA	NA	03	25	30	30	4	20	NV	LO	MO
05	130	G	F	P	P	40	-20	65	40	NA	NA	NA	03	30	40	30	5	25	NV	LO	MO
06	130	G	G	P	P	40	-15	65	40	NA	NA	NA	03	25	35	30	4	10	NV	LO	MO
07	130	VG	G	F	F	40	-10	65	40	NA	NA	NA	02	15	25	35	3	15	NV	NV	LO
08	125	VG	VG	F	F	40	00	70	40	NA	NA	NA	02	10	15	40	2	10	NV	NV	LO
09	125	VG	VG	F	F	40	00	70	40	NA	NA	NA	02	10	15	40	2	10	NV	NV	LO
10	125	VG	G	F	F	40	-05	65	40	NA	NA	NA	02	15	20	35	3	15	NV	NV	LO
11	125	VG	G	F	F	40	-05	65	40	NA	NA	NA	02	15	25	35	3	12	NV	NV	LO

12	125		G	G	P	P	40	-15	65	40	NA	NA	NA	03	25	35	30	4	18	NV	LO	MO
13	120		G	F	P	P	40	-20	65	40	NA	NA	NA	03	20	30	30	4	15	NV	LO	MO

# DEFINITIONS:

Date (day only)

10.7 cm SOLar radio FLux forecast

HF Propagation Conditions for LOw, MIddle, HIgh, and POlar areas (see below)

HF Short Wave Fade Probability (in %)

HF Maximum Usable Frequency in +/- percent above seasonal normals.

HF Prediction CONfidence Level (in %)

VHF Sudden Ionospheric ENHancement Probs (in %), weighted for low-mid lats

PROBability of "s"poradic E (Es) during the UT day for low, mid and high lats

VHF Auroral BackScatter Probs (in %) for LOw, MIddle and HIgh Latitudes

VHF Overall Global DX Potential (in %) - weighted for Low and Middle latitudes

Geomagnetic Activity Kp Index (peak value - see below)

GeoMAGnetic Activity Ap Index (peak value - see below)

AURORA1 Activity for LOw, MIddle and HIgh Latitudes (see below)

HF Prop. Quality rated as: EG=Extremely Good, VG=Very Good, G=Good, F=Fair, P=Poor, VP=Very Poor, EP=Extremely Poor.

Probability of Sporadic E (Es) for the various latitudes is given in percent.

Kp Planetary Index rated: 0=V.Quiet, 1=Quiet, 2=Unstld, 3=Active, 4=V.Active, 5=Minor Storm, 6=Major Storm, 7=Maj-Sev Storm, 8=Severe Storm, 9=V.Severe.

Ap Planetary Index rated: 0-7=Quiet, 8-16=Unstld, 17-29=Active, 30-49=Minor Storm, 50-99=Major Storm, Severe Storm >=100.

Auroral Activity rated: NV=Not Visible, LO=Low, MO=Moderate, HI=High, VH=Very High.

## PEAK PLANETARY 10-DAY GEOMAGNETIC ACTIVITY OUTLOOK (04 JUN - 13 JUN)

EXTREMELY SEVERE												HIGH
VERY SEVERE STORM												HIGH
SEVERE STORM												MODERATE
MAJOR STORM												LOW - MOD.
MINOR STORM		*										LOW
VERY ACTIVE	**	**	*						*			NONE
ACTIVE	***	***	***	**	*		*	*	***	**		NONE
UNSETTLED	***	***	***	***	***	***	***	***	***	***		NONE
QUIET	***	***	***	***	***	***	***	***	***	***		NONE
VERY QUIET	***	***	***	***	***	***	***	***	***	***		NONE
-----												
Geomagnetic Field	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Anomaly	
Conditions	Given in 8-hour UT intervals										Intensity	

CONFIDENCE LEVEL: 70%



# NOTES:

Predicted geomagnetic activity is based heavily on recurrent phenomena. Transient energetic solar events cannot be predicted reliably over periods in excess of several days. Hence, there may be some deviations from the predictions due to the unpredictable transient solar component.

## 60-DAY GRAPHICAL ANALYSIS OF GEOMAGNETIC ACTIVITY

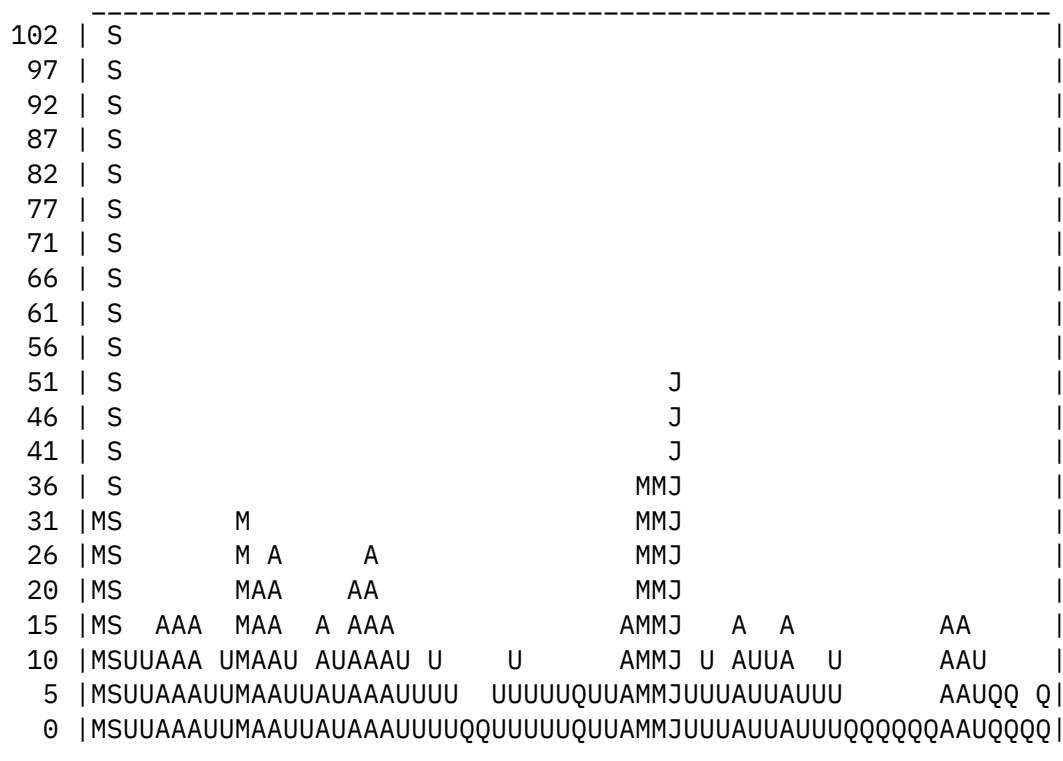


Chart Start Date: Day #094

# NOTES:

This graph is determined by plotting the greater of either the planetary A-index or the Boulder A-index. Graph lines are labelled according to the severity of the activity which occurred on each day. The left-hand column represents the associated A-Index for that day.  
Q = Quiet, U = Unsettled, A = Active, M = Minor Storm, J = Major Storm, and S = Severe Storm.

## CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX

```

146 |
143 | *
140 | *
137 | *
134 | **
131 | * **
128 | ****
125 | *****
122 | *****
119 | *****
116 | *****
113 | *****
110 | *****
107 | *****
104 | *****
101 | *****
098 | *****
095 | *****
092 | *****
089 | *****
086 | *****

```

-----

Chart Start: Day #096

## GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX

```

134 |
133 | *****
132 | *****
131 | *****
130 | *****
129 | *****
128 | *****
127 | *****
126 | *****
125 | *****
124 | *****
123 | *****
122 | *****
121 | *****
120 | *****

```

-----

Chart Start: Day #096

NOTES:

The 10.7 cm solar radio flux is plotted from data reported by the Penticton Radio Observatory (formerly the ARO from Ottawa). High solar flux levels denote higher levels of activity and a greater number of sunspot groups on the Sun. The 90-day mean solar flux graph is charted from the 90-day mean of the 10.7 cm solar radio flux.

### CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS

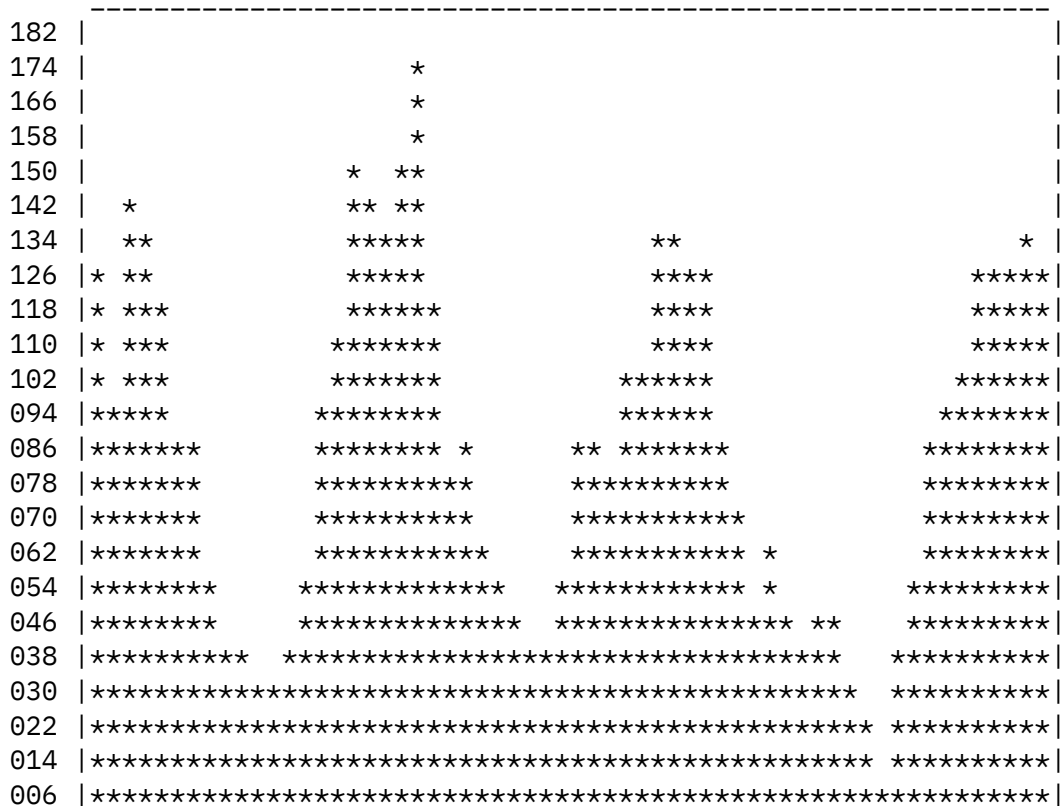


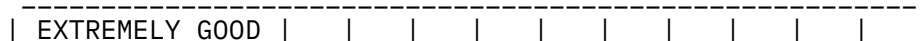
Chart Start: Day #096

NOTES:

The graphical chart of sunspot numbers is created from the daily sunspot number counts as reported by the SESC.

## HF RADIO SIGNAL PROPAGATION PREDICTIONS (04 JUN - 13 JUN)

## High Latitude Paths



CONFIDENCE LEVEL ----- 70%	VERY GOOD												
	GOOD												
	FAIR	***	**	**	***	***	***	***	***	***	**	**	
	POOR		*	*							*	*	
	VERY POOR												
	EXTREMELY POOR												
-----		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
PROPAGATION QUALITY		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
		Given in 8 Local-Hour Intervals											
-----		-----											

#### Middle Latitude Paths

CONFIDENCE LEVEL ----- 70%	EXTREMELY GOOD												
	VERY GOOD					*	*						
	GOOD	***	**	**	***	*	*	*	*	***	***	**	**
	FAIR		*	*							*	*	
	POOR												
	VERY POOR												
	EXTREMELY POOR												
-----		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
PROPAGATION QUALITY		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
		Given in 8 Local-Hour Intervals											
-----		-----											

#### Low Latitude Paths

CONFIDENCE LEVEL ----- 75%	EXTREMELY GOOD					*	*	*	*	*			
	VERY GOOD				*	*	*	*	*	*			
	GOOD	***	***	***	*	*	*	*	*	*	***	***	
	FAIR												
	POOR												
	VERY POOR												
	EXTREMELY POOR												
-----		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
PROPAGATION QUALITY		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
		Given in 8 Local-Hour Intervals											
-----		-----											

#### NOTES:

NORTHERN HEMISPHERE				SOUTHERN HEMISPHERE			
High latitudes	>= 55	deg. N.		High latitudes	>= 55	deg. S.	
Middle latitudes	>= 40 < 55	deg. N.		Middle latitudes	>= 30 < 55	deg. S.	
Low latitudes	< 40	deg. N.		Low latitudes	< 30	deg. S.	

POTENTIAL VHF DX PROPAGATION PREDICTIONS (04 JUN - 13 JUN)

INCLUDES SID AND AURORAL BACKSCATTER ENHANCEMENT PREDICTIONS

# HIGH LATITUDES

FORECAST	Given in 8 hour local time intervals										SWF/SID ENHANCEMENT
CONFIDENCE	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F S S M T W T F S S
											- - - - - - - - - -
0%	***	***	***	***	***	***	***	***	***	***	0% * * * * * * * * * *
20%	***	***	***	***	***	***	***	***	***	***	20% * * * * * * * * * *
40%	***	***	***	***	***	***	***	***	***	***	40%
60%	*	*	**	***	***	***	***	**	*	*	60%
80%											80%
100%											100%
=====	===	===	===	===	===	===	===	===	===	===	-----
100%											100%
80%											80%
60%											60%
40%	* *	* *	*					*	* *	* *	40% * * *           * *
20%	***	***	***	***	***	***	***	***	***	***	20% * * * * * * * * * *
0%	***	***	***	***	***	***	***	***	***	***	0% * * * * * * * * * *
-----	---	---	---	---	---	---	---	---	---	---	- - - - - - - - - -
CHANCE OF	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F S S M T W T F S S
VHF DX	Given in 8 hour local time intervals										AURORAL BACKSCATTER

# MIDDLE LATITUDES

FORECAST	Given in 8 hour local time intervals										SWF/SID ENHANCEMENT
CONFIDENCE	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F S S M T W T F S S
											- - - - - - - - - -
0%	***	***	***	***	***	***	***	***	***	***	0% * * * * * * * * * *
20%	***	***	***	***	***	***	***	***	***	***	20% * * * * * * * * * *
40%	***	***	***	***	***	***	***	***	***	***	40% * * * * * * * * * *
60%	***	* *	***	***	***	***	***	***	* *	* *	60%
80%											80%
100%											100%
=====	===	===	===	===	===	===	===	===	===	===	-----
100%											100%
80%											80%
60%						*	*				60%
40%	***	* *	***	***	***	***	***	***	* *	* *	40%
20%	***	***	***	***	***	***	***	***	***	***	20% * * *         * *
0%	***	***	***	***	***	***	***	***	***	***	0% * * * * * * * * * *
-----	---	---	---	---	---	---	---	---	---	---	- - - - - - - - - -
CHANCE OF	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F S S M T W T F S S
VHF DX	Given in 8 hour local time intervals										AURORAL BACKSCATTER

# LOW LATITUDES

FORECAST   Given in 8 hour local time intervals											SWF/SID ENHANCEMENT											
CONFIDENCE   Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun											F S S M T W T F S S											
----- ---											- - - - - - - - - - -											
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	*	
20%	***	***	***	***	***	***	***	***	***	***	20%	*	*	*	*	*	*	*	*	*	*	
40%	***	***	***	***	***	***	***	***	***	***	40%	*	*	*	*	*	*	*	*	*	*	
60%	**	*	*	**	***	***	***	***	*	*	60%											
80%											80%											
100%											100%											
=====	==	==	==	==	==	==	==	==	==	==		-----										
100%											100%											
80%											80%											
60%	*			*	**	**	**	*			60%											
40%	***	***	***	***	***	***	***	***	***	***	40%											
20%	***	***	***	***	***	***	***	***	***	***	20%											
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	*	
-----	---	---	---	---	---	---	---	---	---	---		-	-	-	-	-	-	-	-	-	-	
CHANCE OF	Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun											F S S M T W T F S S										
VHF DX	Given in 8 hour local time intervals										AURORAL BACKSCATTER											

NOTES:

These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

## AURORAL ACTIVITY PREDICTIONS (04 JUN - 13 JUN)

## High Latitude Locations

CONFIDENCE LEVEL ----- 70%	EXTREMELY HIGH											
	VERY HIGH											
	HIGH											
	MODERATE	*	*	*							*	*
	LOW	***	***	***	**	*	*	**	**	***	***	
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***
	-----	---	---	---	---	---	---	---	---	---	---	---
	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight										

### Middle Latitude Locations

EXTREMELY HIGH | | | | | | | | | |

CONFIDENCE	VERY HIGH												
LEVEL	HIGH												
-----	MODERATE												
75%	LOW	*	*	*							**	*	
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***	***
	-----	---	---	---	---	---	---	---	---	---	---	---	---
	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight											
	-----												

#### Low Latitude Locations

	EXTREMELY HIGH												
CONFIDENCE	VERY HIGH												
LEVEL	HIGH												
-----	MODERATE												
85%	LOW												
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***	***
	-----	---	---	---	---	---	---	---	---	---	---	---	---
	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight											
	-----												

#### NOTE:

A Dynamic Auroral Oval Simulation and Prediction Software Package is available to help make predictions and show the locations where auroral activity should be visible from the ground. For more information regarding this software, contact: "Oler@Rho.Uleth.CA", or "COLer@Solar.Stanford.Edu".

For more information regarding these charts, send a request for the document, "Understanding Solar Terrestrial Reports" to: "Oler@Rho.Uleth.Ca" or to: "COLer@Solar.Stanford.Edu". This document, as well as others and related data/forecasts exist on the STD BBS at: (403) 756-3008.

\*\* End of Report \*\*

Date: 3 Jun 1993 15:48:17 GMT

From: pravda.sdsc.edu!news.cerf.net!usc!howland.reston.ans.net!darwin.sura.net!  
mojo.eng.umd.edu!chuck@network.UCSD.EDU  
To: info-hams@ucsd.edu

References <1543@arrl.org>, <1uihg5INNkej@mojo.eng.umd.edu>,  
<i9srotm@zola.esd.sgi.com>darw  
Subject : Re: Collins tool

In article <i9srotm@zola.esd.sgi.com> glusk@mechcad3.esd.sgi.com (Mark Glusker) writes:

-In article <1uihg5INNkej@mojo.eng.umd.edu>, chuck@eng.umd.edu

-(Chuck Harris - WA3UQV) writes:

--In article <1543@arrl.org> dnewkirk@arrl.org (Dave Newkirk) writes:

---In rec.radio.amateur.misc, davidj@rahul.net (David Josephson) writes:

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----This is a Bristol spline setscrew. Xcelite and others make sets

---

-----Is \*Bristo\*, no \*l\*.

--

--Uh huh. You may believe that, but then you would be wrong. Government tech manuals dating back to the '40s disagree with you, as does Xcelite, and, of course, me.

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-Most sources I've seen say "Bristol", although the R390A technical manuals definitely say "Bristo".

Hmm, You're asking me to re-evaluate my belief system. You mean that the government might have made a mistake?

I went back to the old "Bible", Colvin and Stanley's "American Machinist's Handbook" 1945 Edition, and they call the beasts "Fluted Socket Setscrews".

I then went to the new "Bible", "Machinery's Handbook - 23", and it calls the beasts "ANSI Spline Socket Set Screws"

This leads me to suspect that the name "Bristol", or "Bristo" is the name of a supplier of either the setscrews, or the wrenches. (Much like the famous "Phillips" screwdriver, and "Allen" wrench...)

So, knowing that gobs and gobs of tool companies from that era are named after the city they are located in, I looked up "Brisxxxxx" in the dictionary. I found first, "Bristo", a boy's given name. Then "Bristol", 1) a seaport in SW England on the Avon River, 2) a city in central Connecticut, 3) a city in NE Tennessee, 4) a city in SW Virginia, 5) a town in SE Pennsylvania.

I would bet that the "Bristol" wrench and setscrew hail from Bristol, Connecticut. The reason that I say this is that Connecticut is the home of a large number of old famous tool and die companies such as Brigeport, Pratt & Whitney, Colt, ... Also, Bristol Connecticut is home of a large number of present day machinery companies.

Just an "educated" guess.



Chuck Harris - WA3UQV  
chuck@eng.umd.edu

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Date: 3 Jun 1993 15:00:39 GMT  
From: topaz.bds.com!topaz.bds.com!ron@uunet.uu.net  
To: info-hams@ucsd.edu

References <1udp6e\$kla@access.digex.net>, <1993Jun2.150553.22924@ke4zv.uucp>,  
<1uis6e\$cpc@access.digex.net>xas.  
Subject : Re: Repeaters with those damned beeps

The beep is to let you know when the timer resets. Primarily for operators who wouldn't wait otherwise (bad operating practice) or for ops who would let the repeater unkey (a several second hang time is nicer on the finals of older gear). If you have a time delay that mutes the squelch tail from the receiver, you may have no other indication that the other side has stopped transmitting (please hold during the silence).

-Ron

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End of Info-Hams Digest V93 #678  
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